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EXAMINER

WOLF, JUSTIN P

ART UNIT

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1794

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                      |  |
|------------------------------|--------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/565,375 | <b>Applicant(s)</b><br>ROOSJEN, JANS |  |
|                              | <b>Examiner</b><br>JUSTIN WOLF       | <b>Art Unit</b><br>1794              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/20/2006, 04/27/2007</u> .                                  | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation "Eragrostis," and the claim also recites "Eragrostis tef" which is the narrower statement of the range/limitation.

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4. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation "preferably", and the claim also recites "more and most preferably" which is the narrower statement of the range/limitation.

**Regarding claims 3, 5, 7, 11-15, 27, 28-35, and 42-44**, it is noted that similar broad/narrow language is found in each of the claims.

**Regarding claim 6**, the phrase "wherein the falling number of the grain at the moment of grinding is substantially stable for at least 2-3 weeks" is indefinite. The applicant fails to point out whether the falling number is stable for 2-3 weeks previous to or after the grinding of the grain.

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**Regarding claims 7 and 30**, the phrase “essential part of the flour can pass through a sieve” is indefinite. This phrase fails to distinguish the percent or amount of flour that must pass through a sieve in order to be considered essential.

**Regarding claims 13 and 32** The term "long time" in claims 13 and 32 is a relative term which renders the claim indefinite. The term "long time" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The use of “long time” does not specify to any degree of time exactly how long the grain must be after-ripened.

**Regarding claims 13 and 32** The term "short time" in claims 13 and 32 is a relative term which renders the claim indefinite. The term "short time" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The use of “short time” does not specify to any degree of time exactly how short of a period the grain is after-ripened.

**Regarding claims 14, 15, 33-35, and 42-44**, the claims are indefinite due to the recitation of improper Markush group language. It is advised that the applicant change "comprising" to "consisting of" in each claim.

5. **Regarding claims 29 and 39-41**, Claims 29 and 39-41 provide for the use of flour and dough or batter, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to

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encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 39-41 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 7-10, 15, 16, 18, 27, 29, 39, and 40 rejected under 35 U.S.C. 102(b) as being anticipated by Kindie et al. (US 2003/0143309) taken in view of the evidence given in Teff bv (NPL Document), Teff-Nutrition Data (NPL Document), Eragrain Teff (NPL Document).

**Regarding claim 1, 27 and 29**, Kindie et al. discloses the use of teff flour in an injera bread recipe ([0069]). Given that Kindie et al. discloses teff flour as presently claimed, it is clear that the teff flour would inherently possess falling numbers as presently claimed. Evidence to support this position is found in Teff bv which discloses that the Hagberg falling number to be a minimum of 300 for teff flour.

**Regarding claim 2**, Kindie et al. in light of Teff bv disclose everything from the aforementioned claim 1. Furthermore, it is inherent for the grain to be after-ripened to achieve a falling number of greater than 300.

**Regarding claim 3**, Kindie et al. in light of Teff bv disclose everything from the aforementioned claim 2. Given that the grain would inherently after-ripen after harvesting and given that after-ripening increases the falling number, it is clear that the falling number would inherently be 1.01/1.05/1.20 and 1.30 times higher after harvesting and before grinding.

**Regarding claim 4 and 39**, Kindie et al. discloses the use of flour according to claim 1. Given that Kindie et al. discloses teff flour as presently claimed, it is clear that the teff flour would inherently be gluten-free. Evidence to support this position is found in Teff bv which discloses teff to be gluten-free.

**Regarding claim 7**, Kindie et al. discloses the use of flour according to claim 1. Given that Kindie et al. discloses teff flour as presently claimed, it is clear that the teff flour would inherently pass through a 150/120 and 100 micron sieve. Evidence to support this position is found in Teff bv which discloses sieving analysis wherein a minimum of 70% of the teff flour passes through a 100 micron sieve to be a typical property of teff flour. The examiner interprets 70% to be considered an "essential part of the flour."

**Regarding claim 8**, Kindie et al. discloses the use of flour according to claim 1. Given that Kindie et al. discloses teff flour as presently claimed, it is clear that the teff flour would inherently possess the claimed percentages of calcium, iron, and mineral

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binding substance. Evidence to support this position is found in Teff-Nutrition Data which discloses that 193g of uncooked teff grain contains 14.7mg (0.007%) iron, 347mg (0.179%) calcium, and 0% of mineral-binding substance naturally. The examiner interprets the mineral-binding substance as caffeine in the uncooked teff grain of Teff-Nutrition Data because caffeine is known to be a mineral-binding substance.

**Regarding claim 9**, Kindie et al. discloses the use of flour according to claim 1. Given that Kindie et al. discloses teff flour as presently claimed, it is clear that the teff flour would inherently possess the claimed percentages of carbohydrates. Evidence to support this position is found in Eragrain teff which discloses that teff naturally contains about 20% Rapidly Digestible Starch, 50% Slowly Digestible Starch, and 30% Resistant Starch.

**Regarding claim 10**, Kindie et al. discloses an injera bread recipe with the use of teff flour and barley ([0069]). Therefore, the grain of the injera bread recipe includes both teff flour grains and barley grains, thereby constituting a mixture of grains.

**Regarding claim 15**, Kindie et al. discloses the use of flour according to claim 1. Regarding, the use of a gluten containing crop, Kindie et al. also discloses the use of barley ([0069]).

**Regarding claim 16 and 40**, Kindie et al. discloses a batter comprising flour for making injera bread ([0069]).

**Regarding claim 18**, Kindie et al. discloses a food product comprising teff flour ([0069]).



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3. Claims 1-4, 7-12, 15, 16, 18, 27, 29, 39, and 40 rejected under 35 U.S.C. 102(b) as being anticipated by Science of Bread: Ethiopian Injera Bread (NPL Document) taken in view of the evidence given in Teff bv (NPL Document), Union Mill (NPL Document), Teff-Nutrition Data (NPL Document), and Eragrain Teff (NPL Document).

**Regarding claim 1, 27 and 29**, Science of Bread discloses the use of teff flour in an Ethiopian injera bread recipe. Given that Science of Bread discloses teff flour as presently claimed, it is clear that the teff flour would inherently possess falling numbers as presently claimed. Evidence to support this position is found in Teff bv which discloses that the Hagberg falling number to be a minimum of 300 for teff flour.

**Regarding claim 2**, Science of Bread in light of Teff bv disclose everything from the aforementioned claim 1. Furthermore, it is inherent for the grain to be after-ripened to achieve a falling number of greater than 300.

**Regarding claim 3**, Science of Bread in light of Teff bv disclose everything from the aforementioned claim 2. Given that the grain would inherently after-ripen after harvesting and given that after-ripening increases the falling number, it is clear that the falling number would inherently be 1.01/1.05/1.20 and 1.30 times higher after harvesting and before grinding.

**Regarding claim 4 and 39**, Science of Bread discloses the use of flour according to claim 1. Given that Science of Bread discloses teff flour as presently claimed, it is clear that the teff flour would inherently be gluten-free. Evidence to support this position is found in Teff bv which discloses teff to be gluten-free.

**Regarding claim 7**, Science of Bread discloses the use of flour according to claim 1. Given that Science of Bread discloses teff flour as presently claimed, it is clear that the teff flour would inherently pass through a 150/120 and 100 micron sieve. Evidence to support this position is found in Teff bv which discloses sieving analysis wherein a minimum of 70% of the teff flour passes through a 100 micron sieve to be a typical property of teff flour. The examiner interprets 70% to be considered an "essential part of the flour."

**Regarding claim 8**, Science of Bread discloses the use of flour according to claim 1. Given that Science of Bread discloses teff flour as presently claimed, it is clear that the teff flour would inherently possess the claimed percentages of calcium, iron, and mineral binding substance. Evidence to support this position is found in Teff-Nutrition Data which discloses that 193g of uncooked teff grain contains 14.7mg (0.007%) iron, 347mg (0.179%) calcium, and 0% of mineral-binding substance naturally. The examiner interprets the mineral-binding substance as caffeine in the uncooked teff grain of Teff-Nutrition Data because caffeine is known to be a mineral-binding substance.

**Regarding claim 9**, Science of Bread discloses the use of flour according to claim 1. Given that Science of Bread discloses teff flour as presently claimed, it is clear that the teff flour would inherently possess the claimed percentages of carbohydrates. Evidence to support this position is found in Eragrain teff which discloses that teff naturally contains about 20% Rapidly Digestible Starch, 50% Slowly Digestible Starch, and 30% Resistant Starch.

**Regarding claim 10**, Science of Bread discloses an injera bread recipe with 25% teff and 75% all-purpose flour. Therefore, the grain of the injera bread recipe includes both teff flour grains and all-purpose flour grains, thereby constituting a mixture of grains.

**Regarding claim 11**, Science of Bread discloses the use of flour according to claim 10. The injera bread recipe uses 25% of teff flour, which was noted above to have a falling number above 300 according to Teff bv.

**Regarding claim 12**, Science of Bread discloses the use of flour according to claim 11. Given that Science of Bread discloses all-purpose flour as presently claimed, it is clear that the all-purpose flour would inherently possess the falling numbers as claimed. Evidence to support this position is found in Union Mill which discloses that all-purpose flour has a minimum falling number of 250. \

**Regarding claim 15**, Science of Bread discloses the use of flour according to claim 1. Regarding, the use of a gluten containing crop, Science of Bread also discloses the use of all-purpose flour which is made from wheat grain as noted by Union Mill.

**Regarding claim 16 and 40**, Science of Bread discloses a batter comprising flour for making injera bread (Step 5).

**Regarding claim 18**, Science of Bread discloses a food product comprising teff flour.

4. Claims 1-4, 7-9, 14, 16-18, 27, 29, and 39-41 rejected under 35 U.S.C. 102(b) as being anticipated by Celiac Recipes (NPL Document) taken in view of the evidence

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given in Teff bv (NPL Document), Teff-Nutrition Data (NPL Document), and Eragrain Teff (NPL Document).

**Regarding claim 1, 27 and 29**, Celiac Recipes discloses the use of teff flour in a teff pancake recipe (Page 4). Given that Celiac Recipes discloses teff flour as presently claimed, it is clear that the teff flour would inherently possess falling numbers as presently claimed. Evidence to support this position is found in Teff bv which discloses that the Hagberg falling number to be a minimum of 300 for teff flour.

**Regarding claim 2**, Celiac Recipes in light of Teff bv disclose everything from the aforementioned claim 1. Furthermore, it is inherent for the grain to be after-ripened to achieve a falling number of greater than 300.

**Regarding claim 3**, Celiac Recipes in light of Teff bv disclose everything from the aforementioned claim 2. Given that the grain would inherently after-ripen after harvesting and given that after-ripening increases the falling number, it is clear that the falling number would inherently be 1.01/1.05/1.20 and 1.30 times higher after harvesting and before grinding.

**Regarding claim 4 and 39**, Celiac Recipes discloses the use of flour according to claim 1. Given that Celiac Recipes discloses teff flour as presently claimed, it is clear that the teff flour would inherently be gluten-free. Evidence to support this position is found in Teff bv which discloses teff to be gluten-free.

**Regarding claim 7**, Celiac Recipes discloses the use of flour according to claim 1. Given that Celiac Recipes discloses teff flour as presently claimed, it is clear that the teff flour would inherently pass through a 150/120 and 100 micron sieve. Evidence to

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support this position is found in Teff bv which discloses sieving analysis wherein a minimum of 70% of the teff flour passes through a 100 micron sieve to be a typical property of teff flour. The examiner interprets 70% to be considered an "essential part of the flour."

**Regarding claim 8**, Celiac Recipes discloses the use of flour according to claim 1. Given that Celiac Recipes discloses teff flour as presently claimed, it is clear that the teff flour would inherently possess the claimed percentages of calcium, iron, and mineral binding substance. Evidence to support this position is found in Teff-Nutrition Data which discloses that 193g of uncooked teff grain contains 14.7mg (0.007%) iron, 347mg (0.179%) calcium, and 0% of mineral-binding substance naturally. The examiner interprets the mineral-binding substance as caffeine in the uncooked teff grain of Teff-Nutrition Data because caffeine is known to be a mineral-binding substance.

**Regarding claim 9**, Celiac Recipes discloses the use of flour according to claim 1. Given that Celiac Recipes discloses teff flour as presently claimed, it is clear that the teff flour would inherently possess the claimed percentages of carbohydrates. Evidence to support this position is found in Eragrain teff which discloses that teff naturally contains about 20% Rapidly Digestible Starch, 50% Slowly Digestible Starch, and 30% Resistant Starch.

**Regarding claim 14**, Celiac Recipes discloses a recipe for teff pancakes using teff flour and arrowroot powder (Page 4).

**Regarding claim 16 and 40**, Celiac Recipes discloses a batter comprising flour for making teff pancakes (Page 4).

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**Regarding claim 17 and 41**, Celiac Recipes discloses a gluten-free dough or batter comprising teff flour for use in making teff pancakes (Page 4).

**Regarding claim 18**, Celiac Recipes discloses a food product comprising teff flour (Page 4).

5. Claim 24 rejected under 35 U.S.C. 102(b) as being anticipated by Teff Pasta (NPL Document) taken in view of the evidence given in Teff bv (NPL Document).

**Regarding claim 24**, Teff pasta discloses the recipe a batter and dough that can be extruded to form the desired shape (Page 1). Given that Teff Pasta discloses teff flour as presently claimed, it is clear that the teff flour would inherently possess falling numbers as presently claimed. Evidence to support this position is found in Teff bv which discloses that the Hagberg falling number to be a minimum of 300 for teff flour.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5, 6, 13, 30-32, and 42-44 rejected under 35 U.S.C. 103(a) as being unpatentable over Science of Bread: Ethiopian Injera Bread (NPL Document) in light of Teff bv (NPL Document), Teff-Nutrition Data (NPL Document), Union Mill (NPL Document), and Eragrain Teff (NPL Document) as applied to claims 1, 3, and 10.

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**Regarding claim 5**, Science of Bread in light of Teff bv disclose everything from the aforementioned claim 1. In addition, it would have been obvious to one of ordinary skill in the grain art at the time of the invention to ground the grains after a period of 4/6 or 8 weeks after harvesting to achieve the desired falling number.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time of the invention to adjust the length of after-ripening for the intended application, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

**Regarding claim 6**, Science of Bread in light of Teff bv disclose everything from the aforementioned claim 1. In addition, it would have been obvious to one of ordinary skill in the grain art at the time of the invention to allow the falling number of the grain to have been stabilized for 2-3 weeks before grinding to allow for the use of the highest quality grain.

**Regarding claim 13**, Science of Bread in light of Teff bv disclose everything from the aforementioned claim 10. In addition, it would have been obvious to one of ordinary skill in the grain art at the time of the invention to ground the teff grains after a period of 4/6 or 8 weeks after harvesting to achieve the desired falling number. Also, it would have been obvious to one of ordinary skill in the grain art at the time of the invention to ground the all-purpose flour grains before a period of 4 and 2 weeks after harvesting to achieve the desired falling number.

**Regarding claim 30**, Science of Bread in light of Teff bv disclose everything from the aforementioned claim 3. Furthermore, it has been noted that the teff grain is gluten-free; the grain size allows for a minimum of 70% of the flour to pass through a 100 micron sieve, the grain contains at least 0.005% iron, 0.14% calcium, and no more than 0.8% mineral-binding substance, and the teff flour comprises 10-30% rapidly degradable carbohydrates, 35-65% slowly degradable carbohydrates, and 20-40% resistant carbohydrates as inherent properties to the teff flour as evidenced by Teff bv, Teff-Nutrition Data, and Eragrain. Science of Bread also teaches a recipe with teff flour and all-purpose flour together to form a mixture of grains. It has also been noted above that it would have been obvious to one of ordinary skill in the grain art at the time of the invention to ground the grains after a period of 4/6 or 8 weeks after harvesting to achieve the desired falling number.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time of the invention to adjust the length of after-ripening for the intended application, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

In addition, it would have been obvious to one of ordinary skill in the grain art at the time of the invention to allow the falling number of the grain to have been stabilized for 2-3 weeks before grinding to allow for the use of the highest quality grain.

**Regarding claim 31**, Science of Bread in light of Teff bv, Teff-Nutritional Data, and Eragrain Teff disclose everything from the aforementioned claim 30. In addition,



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the Science of Bread recipe uses 25% of teff flour, which was noted above to have a falling number above 300 according to Teff bv. Regarding the remainder of flour consisting of a falling number lower than 400 and 350, Union Mill discloses that all-purpose flour has a minimum falling number of 250. Therefore, this property of all-purpose flour is considered to be inherent to the all-purpose flour being used in the Science of Bread recipe.

**Regarding claim 32**, Science of Bread in light of Teff bv, Teff-Nutritional Data, and Eragrain Teff disclose everything from the aforementioned claim 30. In addition, it would have been obvious to one of ordinary skill in the grain art at the time of the invention to ground the teff grains after a period of 4/6 or 8 weeks after harvesting to achieve the desired falling number. Also, it would have been obvious to one of ordinary skill in the grain art at the time of the invention to ground the all-purpose flour grains before a period of 4 and 2 weeks after harvesting to achieve the desired falling number.

**Regarding claims 42-44**, Science of Bread discloses everything from the aforementioned claims 30-32. Regarding, the use of a gluten containing crop, Science of Bread also discloses the use of all-purpose flour which is made from wheat grain as noted by Union Mill.

8. Claims 19-23 rejected under 35 U.S.C. 103(a) as being unpatentable over Kindie et al. (US 2003/0143309) in light of Teff bv (NPL Document) and Teff-Nutrition Data (NPL Document) as applied to claims 1 and 8 above, and further in view of Zegeye (NPL Document).

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**Regarding claims 19 and 20**, Kindie et al. in light of Teff bv disclose everything from the aforementioned claim 1. Kindie et al. also discloses preparing the dough or batter by mixing the teff flour with water to form a thick batter, yeast as a leavening agent, and heating the dough ([0069, 0033]).

Kindie et al. does not disclose kneading the dough.

Zegeye discloses kneading the dough in a traditional way (Page 294, Materials and Methods).

It would have been obvious to one of ordinary skill in the baking art at the time of the invention to modify the baking method of Kindie et al. to include the kneading of Zegeye because it would aid in the interaction of the leavening agent and the liquid used to make the batter.

**Regarding claim 21 and 22**, Kindie et al. discloses a gluten-free baked product ([0001, 0002]).

**Regarding claim 23**, Kindie et al. discloses a baked product ([0001, 0002]) using teff flour. Furthermore, Teff-Nutrition Data discloses that 193g of uncooked teff grain contains 14.7mg (0.007%) iron, 347mg (0.179%) calcium, and 0% of mineral-binding substance naturally. The examiner interprets the mineral-binding substance as caffeine in the uncooked teff grain of Teff-Nutrition Data because caffeine is known to be a mineral-binding substance. Therefore, the calcium, iron, and mineral-binding substance content of teff grain is considered to be inherent.

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9. Claims 25 and 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US 3843827) in view of Science of Bread (NPL Document) in light of Teff bv (NPL Document).

**Regarding claims 25 and 26**, Lee et al. discloses using a wheat flour based batter to coat foodstuff (Col. 1, lines 44-58).

Lee et al. fails to disclose using a teff flour based batter to coat the foodstuff with.

Science of Bread discloses a teff flour based batter for use in making bread.

It would have been obvious to one of ordinary skill in the food coating art at the time of the invention to modify the flour batter of Lee et al. to include the teff flour of Science of Bread because it is a healthy and tasty substitute for the consumer that needs a gluten-free diet (Teff bv, Page 1).

Lee et al. discloses the claimed invention except for the use of teff flour for the coating batter. It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the wheat flour of Lee et al. for the teff flour of Science of Bread, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering choice. *In re Leshkin*, 125 USPQ 416.

10. Claim 28 rejected under 35 U.S.C. 103(a) as being unpatentable over Slimak (US 4911943) in view of Science of Bread (NPL Document).

**Regarding claim 28**, Slimak discloses the use and preparation of hypoallergenic cosmetics with finely divided flour used as a thickener, filler, or extender (Col. 11, lines 8-11, 19-23). In addition, Slimak also discloses the use of amaranth flour in

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pharmaceutical products as a filler, extender, or inert ingredient. Both the cosmetic and pharmaceutical products can be prepared as a dry mix or frozen product (Col. 12, lines 6-17).

Slimak fails to disclose the use of teff flour as the flour used in the cosmetic and pharmaceutical composition.

Science of Bread discloses teff flour of claim 1.

It would have been obvious to one of ordinary skill in the cosmetic or pharmaceutical art at the time of the invention to substitute the flour of Slimak with the teff flour of Science of Bread because it would eliminate allergic reactions that food allergy people may have to the non-active ingredients, enhance drug toleration, and be more effective for the allergic patient (Col. 12, lines 8-13).

Slimak discloses the claimed invention except for the use of teff flour for the flour in the cosmetic and pharmaceutical products. It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the amaranth flour of Slimak for the teff flour of Science of Bread, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering choice. *In re Leshkin*, 125 USPQ 416.

11. Claims 33-35 rejected under 35 U.S.C. 103(a) as being unpatentable over Science of Bread: Ethiopian Injera Bread (NPL Document) as applied to claims 30-32 above, and further in view of Celiac Recipes (NPL Document) in light of Approachable Nutrition (NPL Document).

**Regarding claims 33-35**, Science of Bread discloses everything from the aforementioned claims 30-32.

Science of Bread fails to disclose the addition of another gluten-free corp.

Celiac Recipes discloses a teff pancake mix with arrowroot powder (Page 4).

It would have been obvious to one of ordinary skill in the baking art at the time of the invention to modify the recipe of Science of Bread to include the arrowroot powder of Celiac Recipes because arrowroot is a starch that is easily digestible, a good thickener, and mixes well with gluten-free flour (Approachable Nutrition, Page 3).

12. Claims 36-38 rejected under 35 U.S.C. 103(a) as being unpatentable over Science of Bread: Ethiopian Injera Bread (NPL Document) in view of Celiac Recipes (NPL Document) in light of Approachable Nutrition (NPL Document) as applied to claims 33-35 above, and further in view of Kindie et al. (US 2003/0143309) and Zegeye (NPL Document).

**Regarding claims 36-38**, Science of Bread and Celiac Recipes in light of Approachable Nutrition discloses the flour composition of claims 33-35 above, mixing that composition with a liquid and heating the composition.

Science of Bread and Celiac Recipes in light of Approachable Nutrition does not disclose a leavening agent or kneading the dough.

Kindie et al. also discloses yeast as a leavening agent in an injera batter ([0069, 0033]). Zegeye discloses kneading the injera dough in a traditional way (Page 294, Materials and Methods).

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It would have been obvious to one of ordinary skill in the baking art at the time of the invention to modify the composition of Science of Bread and Celiac Recipes to include the yeast of Kindie et al. because the teff batter would not have to ferment for 3 days and therefore would be more efficient ([0069]). It would have been obvious to one of ordinary skill in the baking art at the time of the invention to modify the baking method of Kindie et al. to include the kneading of Zegeye because it would aid in the interaction of the leavening agent and the liquid used to make the batter.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUSTIN WOLF whose telephone number is (571)270-7085. The examiner can normally be reached on M-Th 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571)272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/J. W./

Examiner, Art Unit 1794

/Callie E. Shosho/

Supervisory Patent Examiner, Art Unit 1794

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